WHAT IS CLAIMED IS:

1. A method for monitoring of disease progression and pathologic phenomena that correlate with surface density of Human Leukocyte Elastase (HLE) associated with plasma membranes of lymphocytes and mononuclear phagocytes, said method comprising:

A. Preparing a test sample which comprises lymphocytes and mononuclear phagocytes wherein said lymphocytes and mononuclear phagocytes are capable of differentiation from other endogenous matter contained within said test sample

B. Blocking CD4 or chemokine receptors on plasma membranes of lymphocytes and mononuclear phagocytes in said test sample by interaction of said receptors with a binding material so as to render said receptors non-reactive (competitive) relative to the HLE receptors on the plasma membrane; and

C. Contacting said plasma membranes of said lymphocytes and mononuclear phagocytes with an immunoreagent specific for interaction with HLE receptors on said plasma membranes of lymphocytes and mononuclear phagocytes, so as to form an immunocomplex between said plasma membranes of said lymphocytes and mononuclear phagocytes and said immunoreagent including a material, which when interacted with said HLE receptors, produces a characteristic physical change in the lymphocytes and mononuclear phagocytes that can be monitored

D. Monitoring said test sample for said immunocomplex so as to detect HLE density of said plasma membranes.

2. The method of Claim 1, wherein said immunocomplex is further reacted with another material to produce a indicator species indicative of the presence of the immunocomplex.

3. The method of Claim 1, wherein said immunocomplex is monitored directly by confocal laser scanning microscopy and flow cytometry.

4. The method of Claim 1, wherein said HLE density is monitored as function of cellular response to pathologic states resulting from microbial organisms, transplantation, autoimmunity, cancer, or HIV infection.

5. The method of Claim 1, wherein said immunoreagent is labeled with a reporter or indicator molecule capable of producing a detectable signal that can be correlated with HLE density on said plasma membranes.

6. The method of Claim 6, wherein immunocomplex is monitored by isolation thereof with a solid phase and said reporter or indicator molecule measured immunochromatographic analysis, radial partition immunoassay, or microparticle capture immunoassay.

7. The method of Claim 6, wherein said reporter or indicator molecule comprises a fluorescent material, a material discernible within the visible spectrum or produces a fluorescent material, a material discernible within the visible spectrum, upon interaction with a substrate capable of forming a fluorescent material, a material discernible within the visible spectrum.

8. The method of Claim 6, wherein the immunoreagent comprises an antibody, antigen or combination thereof specific for interaction with a binding site on said plasma member associated with a HLE receptor.